

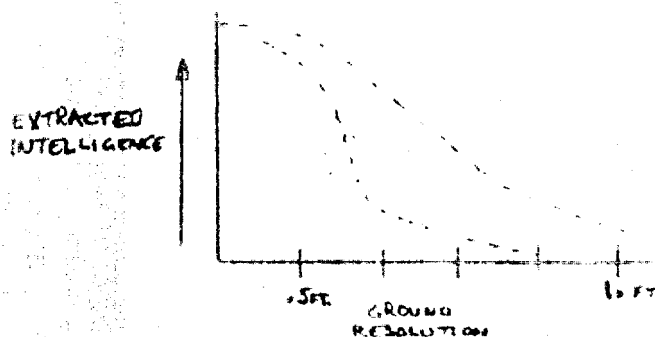
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Declass Review by NGA.

We are well under way in firming up the experimental design, except for some aspects which will be established when we get together with one of [redacted] people. Meanwhile, I thought it best if I described our plans as they stand so far.

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The objective of this study is to determine the amount of general and tactical intelligence which can be extracted from photographs as a function of the ground resolution of the photographs. Simply, the purpose is to determine the where and position of curves for each of the two types of intelligence:



The planned procedure for achieving this objective includes (1) the preparation of carefully prepared positive transparencies of several scenes with measured image-quality parameters, (2) viewing of the transparencies and intelligence extraction by P.I.s and (3) study and analysis of the resulting responses leading to specific conclusions. The positive transparencies will simulate systems with 3, 6, 9 and 12 feet focal length optics using Type 4404 (S0-132) film operating at an altitude of 120 statute miles, resolving objects on the ground ranging in size from 1/2 to 16 feet. Hence, the picture matrix will be

Ground Resolution, Feet	Focal Length, Ft.			
	3	6	9	12
1/2				174 1/mm
1		174 1/mm	116 1/mm	87 1/mm
2	174 1/mm	87 1/mm	58 1/mm	43 1/mm
4	87 1/mm	43 1/mm	29 1/mm	22 1/mm
8	43 1/mm	22 1/mm	14 1/mm	11 1/mm
16	22 1/mm	11 1/mm	7 1/mm	5.4 1/mm

and consist of twenty pictures of each of several typical scenes.

The primary reason for simulating several focal lengths (or image scales) is to include the effect of the viewing equipment and viewer on the intelligence extraction process.

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As mentioned previously, the specific type of questions to be asked of the P.I.'s and the specific method of response analysis has not yet been completely planned.

We hope to be able to make use of a relatively large number of [redacted] people (each person for a short period) during the week of 3-7 February and we are planning to complete the study before 17 February.

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not 3 or 1

I hope the above describes, although briefly, the study you want performed. If you wish some changes, please let me know as soon as possible.

Sincerely,

[redacted]

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saj